

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

UNITED STATES OF AMERICA,

Plaintiff,
vs. No. CIV 06-0933 RB/RHS

**99,223.7238 ACRES OF LAND, more or less, in
SANDOVAL and RIO ARRIBA COUNTIES,
NEW MEXICO, and J.B. HARRELL, JR., et al.**

Defendants.

MEMORANDUM OPINION AND ORDER

THIS MATTER came before the Court on Defendants' Motion to Adopt the Special Commission's Report (Doc. 188), filed on April 7, 2009, Defendants' Objections to the April 9, 2009 Report and Recommendations (Doc. 197), filed on April 22, 2009; and Plaintiff's Objections to the Commissioners' Findings and Motion to Modify Award of Just Compensation (Doc. 198), filed on May 7, 2009. On July 8, 2009, the Court issued an order providing that a hearing on the issues of just compensation and the appropriateness of sanctions would be set in October 2009 and requiring the parties to file summaries of evidentiary support for their positions ten days prior to the hearing. On September 28, 2009, Plaintiff and Defendants filed separate summaries of evidentiary support. A hearing on the issues of just compensation and the appropriateness of sanctions was held on October 13, 2009. Having considered the submissions, record, and relevant law, the Court finds that the Commissioners' Findings and report and recommendation should be rejected.

Additionally, having considered de novo the record of the March 2-4, 2009 proceedings before the Commission and all exhibits submitted by counsel, and having considered the record and the exhibits submitted by counsel at the October 13, 2009 hearing, the Court finds that, as of May 21, 2006, the fair market value of Defendants' undivided 12.5 percent mineral interest underlying

99,223.7238 acres of land, more or less, in Sandoval and Rio Arriba Counties, New Mexico (hereinafter “Baca Ranch”), including the leases of the geothermal minerals and for geothermal energy development held by GeoProducts of New Mexico, Inc. (hereinafter “GeoProducts”) had a fair market value of \$3,800,000. Moreover, the Court finds that, as of May 21, 2006, Defendant Edward “Bubba” Spears’ undivided 1.25 percent mineral interest in 3,096 acres of lands previously purchased by Plaintiff for inclusion in the Bandelier National Monument (hereinafter “Bandelier mineral estate”) had a fair market value of \$968. Finally, the Court finds that sanctions in the amount of \$50,000 should be awarded in favor of Defendants and against Plaintiff, pursuant to Federal Rule of Civil Procedure 37(b)(2)(C).

I. Introduction.

At a June 3, 2008 settlement conference before United States Magistrate Judge Robert H. Scott, the parties agreed to appoint a three-member commission to value Defendants’ undivided 12.5 percent fee mineral interest in the Baca Ranch pursuant to Fed. R. Civ. P. 71.1 (h). On June 19, 2008, United States District Judge J. Thomas Marten approved a Stipulated Order for Referral to Land Commission. Subsequently, the parties stipulated that the Commission would consist of an impartial commissioner selected by Plaintiff, United States Magistrate Judge Harry McKee, and impartial commissioner selected by Defendants, Mr. Ronny Platt, and an impartial commissioner selected by both parties, United States Magistrate Judge Leslie C. Smith.

The Commission held proceedings regarding valuation on March 2-4, 2009. On March 18, 2009, the Commission set the fair market value of Defendants’ undivided 12.5 percent fee mineral interest in the Baca Ranch at \$6,100,000, and the Bandelier mineral estate at \$800.

Defendants filed a motion to sanction Plaintiff for disclosing the Van Court Supplemental Appraisal, (hereinafter “VCSA”), on February 26, 2009, four days before trial. The VCSA was

prepared on January 18, 2000, and valued a portion of the Baca Ranch purchased by Santa Clara Pueblo and two restrictive easements. On March 18, 2009, Defendants' Second Motion for Sanctions was referred to Judge Scott. On April 9, 2009, Judge Scott held a hearing and issued his Report and Recommendation in which he recommended that the motion be denied based on waiver.

II. Standard of Review.

The Commissioners' Findings and Judge Scott's Report and Recommendation are subject to de novo review. Specifically, Rule 71.1(h) provided the Commission with the powers of a master under Rule 53(c), and its actions and report are subject to the provisions of Fed. R. Civ. P. 53(f)(3). *See* Fed. R. Civ. P. 71.1(h)(2)(D). In reviewing the decision of the Commission, the Court "must give the parties notice and an opportunity to be heard; may receive evidence; and may adopt or affirm, modify, wholly or partly reject or reverse, or resubmit to the master with instructions." Fed. R. Civ. P. 53(f)(1).

Rule 53(f)(3)(A) provides that the district court must decide de novo all objections to the findings of fact, unless the parties, with the district court's approval, stipulate that the findings will be reviewed for clear error. *See* Civ. P. 53(f)(3)(A). The Stipulated Order for Referral to Land Commission, which counsel prepared after a settlement conference with Judge Scott, does not contain a stipulation that the findings will be reviewed for clear error. (Doc. 128.) Thus, the de novo standard applies to all objections to the findings of fact.¹ The Commission's conclusions of

¹ The "clearly erroneous" standard of review applied until 2003, when Fed. R. Civ. P. 53 was significantly amended. *See Guardian Pipeline, L.L.C. v. 950.80 Acres of Land*, 486 F.Supp.2d 741, 745 (N.D.Ill. 2007) (discussing change in standard of review); *see also Summers v. Howard Univ.*, 374 F.3d 1188, 1195 n. 6 (D.C. Cir. 2004) (noting effective date of amendment was December 1, 2003). For this reason, cases decided before 2003 state that the clearly erroneous standard of review applies to reports of land commissions. *See, e.g., United States v. Merz*, 376 U.S. 192 (1964). Currently, however, Rule 53(f)(3) states that "this court must decide de novo all objections to findings of fact made or recommended by a master unless the parties stipulate" otherwise. Fed. R. Civ. P. 53(f)(3). Because the parties have not stipulated otherwise, and this case was filed after December 1, 2003, the de novo standard applies to the Commissioners' Findings.

law are subject to de novo review. *See* Fed. R. Civ. P. 53(f)(4).

The same standard applies to Judge Scott's decision. On March 18, 2009, the Court referred Defendants' motion for sanctions to Judge Scott to recommend a proposed disposition pursuant to 28 U.S.C. § 636(b)(1)(B). (Doc. 175.) Defendants objected to the Report and Recommendation under 28 U.S.C. § 636(b)(1). Under Section 636(b)(1), after reviewing de novo those portions of the Report and Recommendation to which the objections are directed, the district judge is free to "accept, reject, or modify, in whole or in part, the findings or recommendations made by the magistrate judge." *Id.*; *see also* Fed. R. Civ. P. 72(b)(3). Thus, the de novo standard of review applies to the Commissioners' Findings and Judge Scott's Report and Recommendation. Application of this standard requires review of all the evidence.

III. Summary of the Appraisals.²

A. Van Court Appraisal.

On September 1, 1998, Bill Van Court, MAI (Member, Appraisal Institute), New Mexico Certified Appraiser ("NMCA"), and Laurie Van Court, MAI, NMCA of Van Court and Company, valued 94,763.551 acres³ of the Baca Ranch at \$101,000,000. (Defs. Ex. 85.) The appraisal was commissioned by Dunigan Enterprises, the then-owner of the property, and approved by USDA Forest Service Chief Appraiser Paul Tittman, ARA (Accredited Rural Appraiser) and USDA Forest Service Regional Appraiser Gerald Sanchez, RPRA (Real Property Review Appraiser), MSA (Master Senior Appraiser). While the 1998 Van Court appraisal did not ascribe any value to

² Although the Court has reviewed the entire record de novo, it finds it helpful to focus on the appraisals discussed herein.

³ 94,763.551 acres, combined with the 5,045.5298 acres acquired by Santa Clara Pueblo equals 99,809.0808 acres, which approximately corresponds to "99,223.7238 acres of land, more or less," the amount stated in the caption of this matter.

geothermal resources or undiscovered minerals, it did cover 87.5 percent of the mineral estate.

The Van Courts discussed the geothermal features, the Unocal lease, the 50-megawatt geothermal energy demonstration project at Redondo Creek, and the capped geothermal test wells. They noted that the geothermal lease was terminated in 1984, the test wells were capped, and the improvements from the geothermal project reverted back to the lessors. The Van Courts stated that, in their opinion, “the presence of the geothermal resources enhances the per acre value of the ranch. However, in the absence of evidence of demand from a well-defined market and operating data from existing facilities, ascribing a present value to the geothermal based on a discounted future value is speculative.” (Pl. Ex. P128 at 18.)

The Van Courts noted that the probable highest and best use of the property was public acquisition for recreation and preservation, or private acquisition for preservation. (Pl. Ex. P128.) Other potential feasible uses, consisting of livestock ranching, hunting and outfitting, timbering, and planned development, were mentioned. The portion of the property located south of Highway 4, as well as the Valle Grande, were identified as best suited for planned development. The meadow areas and the ranch headquarters would be highly saleable as a ranch. Timbering and hunting operations would be appropriate for the more mountainous areas.

The Van Courts concluded that a combination of potential feasible uses would represent the highest and best use of the property. With respect to the vacant property, the Van Courts believed that a multiple-use scheme, recognizing that different areas of the property were better suited to different uses, would result in the highest land value. With respect to the ranching and outfitting improvements, the Van Courts opined that the highest and best use of these improvements was continued use of the property as improved.

After considering and rejecting the income approach and the cost approach to valuation, the

Van Courts determined that a comparable sales approach was the most reliable indication of value. (Defs. Ex. 85; Pl. Ex. P128.) Considering five comparable sales, focusing on the two most comparable sales, and giving greater weight to one of them (sale of the former Chama Land & Cattle Co. property to the Jicarilla Apache Tribe), the appraisers derived a residual land value of \$99,879,000, or about \$1,053 per acre, after subtracting the contributory value of improvements, which they set at \$1,121,000. Thus, according to the Van Court Appraisal, dated September 1, 1998, the total appraised value of the surface estate and 87.5 percent of the mineral estate was \$101,000,000.

B. Van Court Supplemental Appraisal.

On January 18, 2000, the Van Courts appraised approximately 5,045.5298 acres in fee simple,⁴ plus a restrictive easement to be held by Santa Clara Pueblo encumbering 1,193.3590 additional Baca Ranch acres adjacent to and immediately west of the property line separating the 5,045.5298 acres from the rest of the Baca Ranch (herein “VCSA”).⁵ (Defs. Exs. 86 and 87.) This appraisal also estimated the loss in value attributable to 364.4285 acres of the 5,045.5298 acres of fee land subject to a restrictive easement to be held by the owners of the Baca Ranch (the United States purchased the Baca Ranch from the Dunigans in a concurrent sale).

The VCSA was commissioned by the United States Forest Service (hereinafter “Forest Service”) as a basis for the concurrent acquisition by Santa Clara Pueblo of the 5,045.5298 acres and imposition of the restrictive easements. (Defs. Exs. 86 and 87.) Mr. Tittman and Mr. Sanchez reviewed and approved the appraisal. The VCSA covered a total of 6,239 acres (rounded) (the

⁴ The 5,045.5298 acres does not include Defendants’ 12.5 percent mineral interest. (Def. Ex. 86 at 5.)

⁵ Plaintiff disclosed the VCSA and the Appraisal Review Report for this appraisal four days before trial. (Def. Ex. 86 and 87.) Defendants claim they are entitled to sanctions based on the late disclosure of these documents.

5,045.5298 fee area plus the 1,193.3590 additional acres covered by the restrictive easement in favor of Santa Clara Pueblo). Neither improvements nor known geothermal resources exist on the subject 5,045.5298 acres.

The property addressed in the VCSA is a triangularly-shaped parcel, located in the northeastern corner of the Baca Ranch, encompassing the headwaters of Santa Clara Creek. (Defs. Ex. 86.) It is mountainous, isolated, and covered with predominately second growth spruce and douglas fir, with some old-growth pockets. The area has religious significance to Santa Clara Pueblo.

The two restrictive easements “sandwich” the fee area’s western boundary. The easements prohibit all forms of timber harvest, structural development rights, motorized vehicle access, except for administrative access by the owners of Baca Ranch on the easement area located west of the boundary, and surface disturbance for purposes of mining or drilling. According to the statement of James R. Lyons, Undersecretary of Agriculture for Natural Resources and Environment, before the U.S. Senate Committee on Energy and Natural Resources, Subcommittee on Forest and Public Land Management, the purpose of the easements was to

ensure that there will be no development on either side of the boundary, both to protect the land and to ensure that the view from either property will not be scarred with towers or other buildings. This easement also provides for mutual access to the easement area for administrative purposes and to simplify management.

(Pl. Ex. P127.) The transaction was recorded in both Sandoval and Rio Arriba Counties. (Letter from John Widdoss to Jeffrey Tapick, dated 8/17/09.)

The VCSA determined that the highest and best use of the property was as vacant, multiple-use recreation/ranch property. (Def. Ex. 86.) The Van Courts considered and rejected the income and cost approaches as unreliable due to lack of independent income information and the absence

of structural improvements upon which the cost approach relies. Based on the comparable sales analysis, the VCSA concluded that \$817 per acre, or \$4,120,684, reflected the value of the 5,045.5298 acres in fee simple.

As for the easements, the Van Courts found that the prohibition on timber sales equated to a loss of 26 percent of the property value, the prohibition on structural development equated to a loss of 10 percent of the property value, the prohibition on vehicle access equated to a loss of 10 percent of the property value, and the prohibition on surface disturbance equaled a loss of 5 percent of the property value, for a total decrease of 51 percent in value.⁶ This equates to a value of \$497,054 for the 1,193.3590-acre easement in favor of Santa Clara Pueblo, and a value of \$151,791 for the 364.4285-acre easement in favor of the Baca Ranch. The 5 percent loss attributed to the surface disturbance prohibition is equivalent to \$40.84 per acre or \$48,737 for the 1,193.3590-acre easement in favor of Santa Clara Pueblo, and \$14,883 for the 364.4285-acre easement in favor of Baca Ranch, or \$63,620 in total value of the surface disturbance prohibition, according to the VCSA, dated January 18, 2000.

C. Sales of the Baca Ranch Surface Estate and 87.5 Percent of the Mineral Estate.

In 2000, Congress enacted, and the President signed, the Valles Caldera Preservation Act to authorize Plaintiff to acquire, on a “willing seller basis,” “all or part of the rights, title, and interest in and to approximately 94,761 acres of the Baca ranch.” 16 U.S.C. § 698v-2(a)(1), (a)(3)(A).

On March 6, 2000, Defendants’ minority mineral owners leased their 12.5 percent interest to Defendant GeoProducts (collectively, “Defendants”).

In July 2000, the United States purchased the entire Baca Ranch surface estate and 87.5

⁶ Only the timber value was based on actual numbers. The other values were estimated percentages.

percent of the mineral estate for \$101,476,958⁷ from the Dunigans. Santa Clara Pueblo simultaneously purchased the property addressed in the VCSA pursuant to an assignment contract and a first amendment to assignment contract with the United States. (Def. Exs. 88 and 89.)

Defendants' mineral interests remained outstanding. The Forest Service engaged in negotiations with Defendants to acquire their interests. Based on an August 1998 appraisal of the mineral estate, which is referenced in the Van Court Appraisals, the Forest Service set the value of the basic mineral estate of the Baca Ranch at \$15 per acre, which equals \$1,488,356 for the 100 percent of the mineral estate, and \$186,044 for Defendants' 12.5 percent interest. (Defs. Ex. 87.)

D. Halmbacher Appraisal.

On November 20, 2001, Gerald P. Halmbacher, New Mexico Certified General Real Estate Appraiser, of Headquarters West, Ltd., appraised Defendants' interest on behalf of the Forest Service, which approved the appraisal. (Defs. Exs. 15 and 16.) By mutual agreement between the Forest Service and Defendants, Mr. Halmbacher was instructed to appraise the entire mineral estate as though it were a single, consolidated ownership, even though Plaintiff already owned 87.5 percent of those rights.

Mr. Halmbacher found that the highest and best use of the mineral estate was development of the geothermal and pumice resources and consolidation of the area with a low development potential for minerals with the surface estate. (Def. Ex. 15.) Mr. Halmbacher valued 100 percent of the Baca Ranch mineral estate at \$15,000,000 and Defendants' 12.5 percent interest at \$1,875,000.

⁷ According to a reference in the Halmbacher Appraisal, discussed *infra*, the sellers attributed the total value of the entire mineral estate at \$18,181,000. (Def. Exs. 15 at 31 and 16 at 9.) The Halmbacher Appraisal noted that this value "was never really promoted as the contributory mineral value by the sellers nor accepted by the Forest Service as such." (Def. Ex. 15 at 71.) 12.5 percent of \$18,181,000 is \$2,272,625. By extrapolation, the 2000 sale of the Baca Ranch to the United States valued Defendants' 12.5 percent mineral interest at \$2,272,625.

In valuing the geothermal resource, Mr. Halmbacher considered the sales comparison, income, and costs approaches. (Def. Ex. 15.) With regard to the sales comparison, he discussed sales of power plants and steam fields in California. While he found that such sales did not provide an adequate comparison, they did provide an indicator regarding the price per megawatt and the overall capitalization rate.⁸

Mr. Halmbacher also analyzed geothermal lease sales and bonus bids through the Bureau of Land Management. (Def. Ex. 15.) Mr. Halmbacher noted that no bonus, or any other type of prepayment, was associated with the 2000 GeoProducts lease, and the present value of the lease payments, as of November 9, 2001, was \$58,000. While he found nothing in the marketplace that would qualify as a direct comparison, Mr. Halmbacher opined that the market indicated that a bonus bid might be paid to procure a geothermal lease.

Mr. Halmbacher assessed a total lease bonus of \$3,670,000. This amount consisted of (1) \$933,000 for a leasing right bonus of \$100 per acre for the 9,331 acres containing the geothermal resource, (2) \$237,000 for the value of the Unocal buildings and site improvements, and (3) \$2,500,000 for the value of the working interest in the plugged geothermal wells. In addition, considering a power price of \$70 per megawatt-hour, a discount rate of 10-12 percent, and a 18.8-megawatt net potential power production, Mr. Halmbacher arrived at \$9,000,000 for the royalty interest, for a total rounded value of \$12,670,000 for the geothermal resource. (Def. Exs. 15 and 16.)

With respect to the geothermal resource, Mr. Halmbacher relied, in part, upon a report prepared by geologist David E. Wahl, Ph.D., which found that the most substantial mineral potential

⁸ Between 2001 and 2006, after the Halmbacher appraisal and before the date of taking, there were 10 transactions that were considered by John Widdoss in his 2007 appraisal commissioned by Plaintiff. (Pl. Ex. P1.)

would be the possible development of geothermal energy. Dr. Wahl noted that past efforts had documented geothermal fluids capable of supporting an electrical generating capacity of approximately 20 megawatts for 20 years.

Additionally, Mr. Halmbacher considered a 1998 report prepared by Dr. Subir, Ph.D. of GeothermEx, Inc., (hereinafter “1998 Sanyal report”), which valued the geothermal resource at \$13,300,000. (Pl. Ex. P85.) Mr. Halmbacher concluded that the geothermal resource had the potential for development of five blocks of 20 gross megawatts each over a nine year period or 100 megawatts. (Def. Ex. 15 at 38.)

Mr. Halmbacher valued the pumice resource at \$234,000 by the comparative sales analysis and at \$217,000 by the income approach, for an overall opinion of value of \$225,000 for the pumice. (Def. Exs. 15 and 16.)

The 86,500 acres of the subject property with low development potential of mineral rights was valued at \$10 per acre by a comparative sales approach for consolidation with the surface estate. (Def. Exs. 15 and 16.) The rounded total for the low development potential mineral rights was \$865,000. The total amount for the geothermal resource, the pumice resource, and the low development potential mineral rights was \$13,790,000.

Relying on the 1998 Sanyal report, which valued the geothermal resource at \$13,300,000, and a 1998 report by Chapman, Wold, and Griswold, which valued the pumice and non-geothermal minerals at \$4,188,000,⁹ Mr. Halmbacher concluded that the sellers in the 2000 sale attributed the total value of the mineral estate at \$18,181,000. By extrapolation, Mr. Halmbacher opined that the

⁹ Interestingly, while these 1998 reports were prepared for the Dunigans, they were referenced in neither the original Van Court Appraisal nor the VCSA. Instead, the Van Courts mentioned an unnamed report that valued the minerals at \$15 per acre.

sellers would have valued Defendants' 12.5 percent interest at \$2,272,625. (Def. Ex. 15 at 31.) Based, in part, on the assumption that the sellers had valued the total mineral estate at \$18,181,000, Mr. Halmbacher concluded that the value for 100 percent of the mineral rights to be \$15,000,000. (Def. 15 at 71.) Under Mr. Halmbacher's analysis, Defendants' 12.5 percent interest in the Baca Ranch mineral estate was worth \$1,875,000.

E. Taking of Defendants' Interest.

On December 18, 2001, Plaintiff offered to purchase Defendants' 12.5 percent interest in the Baca Ranch mineral estate for \$1,875,000. (Def. Ex. 17.) Defendants rejected this offer on January 28, 2002.

In December 2005, Congress amended the Valles Caldera Preservation Act to authorize Plaintiff to exercise eminent domain over Defendants' 12.5 percent mineral interest if negotiations to acquire the interest were unsuccessful. *See* 16 U.S.C. § 698v-2(e)(5). After the parties were unable to reach an agreement, Plaintiff exercised eminent domain authority over the outstanding 12.5 percent minority mineral interests. The stipulated date of taking is May 21, 2006.

On October 2, 2006, Plaintiff filed the instant action and deposited \$700,000 with the Clerk of the Court as the amount it claims constitutes "just compensation" for Defendants' property.

F. Widdoss Appraisal.

On August 7, 2007, John Widdoss, MAI, ARA, of Hall-Widdoss & Co., Inc., acting on behalf of Plaintiff, valued 100 percent of Baca Ranch mineral estate at \$1,488,500, Defendants' 12.5 percent interest at \$186,000,¹⁰ the "1.5 percent interest" at \$500, and the value of the GeoProducts

¹⁰ Notably, \$186,000 is roughly equivalent to the \$15 per acre value, or \$186,044 for Defendants' interest, set by the Forest Service based on the 1998 mineral appraisal mentioned in the original Van Court Appraisal and the VCSA. (Def. Ex. 87.) At the October 13, 2009 hearing, Mr. Widdoss testified that he did not receive documents containing the \$15 acre value until after he completed his appraisal. (Tr. at 38.)

lease at \$0. (Pl. Ex. P1.) Mr. Widdoss applied a comparable sales analysis to reach these values. Mr. Widdoss opined that the highest and best use was mineral exploration, speculative investment, or consolidation with the surface estate.

For his comparable sale analysis, Mr. Widdoss focused on five comparable sales, including the 2000 sale of the Baca Ranch surface and 87.5 percent of the mineral estate, a closed geothermal facility at Bottle Rock of the Geysers in California, a closed geothermal facility at Raft River, Idaho, an undeveloped geothermal prospect called Newberry in Oregon, and a sale of 98,614 acres in San Diego Canyon, which is located one to two miles southwest of the Baca southwest boundary. (Pl. Ex. P1.)

The summary of the 2000 Baca Ranch sale refers to an appraisal by Forest Service contract appraiser Dave Peterson, ARA, of Denver.¹¹ According to Mr. Widdoss, the Peterson appraisal did not attribute any value to the 87.5 percent mineral estate.

At the time of the Bottle Rock sale, no value was attributed to the geothermal resource due to “steam out.” The property was subsequently rehabilitated by the use of water from an outside source. The Raft River facility was a failed DOE demonstration project that was in the process of reopening. The sale of the Raft River facility had allocated \$175,000 to the geothermal resource. The sale of the Newberry prospect attributed no value to the geothermal resource. The San Diego Canyon property contained pumice and aggregate potential similar to the subject, but it was rated lower from a geothermal prospective. The sale of the San Diego Canyon property attributed \$9.25 per acre to its mineral value. Based on a comparable sales technique, wherein he allocated value

¹¹ This might be the appraisal, mentioned by the Van Courts, that set the value of the minerals at \$15 per acre. The Peterson appraisal has not been located in the record. However, according to Mr. Widdoss, the Peterson appraisal did not attribute any value to the 87.5 percent mineral estate. This would indicate the Peterson appraisal is not the one mentioned by the Van Courts.

to the geothermal resources in the comparable sales, Mr. Widdoss valued the entire mineral estate of the Baca Ranch at \$15.00 per acre. This equates to \$1.88 per acre for Defendants' 12.5 percent share.

It is material that Mr. Widdoss observed that “[t]he Baca Ranch has been leased for geothermal development in the past with former identification of ‘proven’ resource capable of generating 18-20 megawatts of electric capacity (1970's). However, no major geothermal development company has shown interest in the property since 1982.” (Pl. Ex. P1 at 67.) “The subject’s mineral rights have potential for geothermal development; however, that prospect is rated as low at this time.” *Id.* “[M]ineral and/or geothermal exploration is a possibility, but a low probability at this time.” (Pl. Ex. P1 at 68.) Mr. Widdoss found it significant that the property is located 20 to 25 miles from the power grid over steep terrain with many adverse users. (Pl. Ex. P1 at 75.)

Mr. Widdoss based his conclusions regarding the geothermal resource on reports prepared by Paul Brophy, M.S., Geologist and President of EGS, Inc., Kathleen Enedy and Steven Enedy, Engineer of Graphic Vision Co., and Dennis V. Johnson, M.S., Consulting Geologist. (Pl. Exs. P3 and P4.) These reports emphasize that there are no proven geothermal reserves in the Baca Ranch using the Society of Petroleum Engineers’ definition for “proven” reserves. The Baca Ranch exhibits extremely low permeability compared to commercial geothermal systems. The drilling of new wells would require millions of dollars in additional investment. Additionally, a transmission line would be required and GeoProducts had not secured a power purchase agreement.

The Brophy/Enedy Report found it significant that, in 1978, the U.S. Department of Energy selected Unocal and PNM to assist in the development of a 50-megawatt demonstration project at Redondo Creek within the Baca Ranch. (Pl. Ex. P57.) Unocal received grants from the DOE and

drilled more than 20 exploratory wells. (Pl. Ex. P3.) Carel Otte, Ph.D. a geologist who worked for Unocal on the Baca Ranch project in the late 1970s and early 1980s, testified in his deposition that the wells produced enough steam sufficient to supply a power plant having the capacity to produce 16 megawatts of power. (Pl. Ex. P 57.) Additional wells were drilled, but the combined output was insufficient to produce enough steam for a 50-megawatt power plant. (Pl. Ex. 57.) Despite significant government support, Unocal, DOE, and PNM decided to terminate the project in January 1982. DOE no longer funds geothermal demonstration projects and drilling costs have increased significantly since the early 1980s.

G. Albert Appraisal.

On September 18, 2007, Mitchell E. Albert, Ph.D., of Dry Creek Resources, Inc., acting on behalf of Defendants, valued the Defendants' 12.5 percent interest at \$8,900,000 in royalty interest and the "likely lessee operator value" at between \$9,850,000 and \$20,800,000, for a total value of \$18,750,000 to \$29,700,000. (Defs. Ex. 26.) Dr. Albert determined that the lack of suitable comparative sales and the inability to adjust for geologic production and market differences required application of the income approach for the operating and royalty interests.

Dr. Albert postulated that the geothermal reserve was 254 megawatts, the power plant capacity was 220 megawatts, the well deliverability was 6 megawatts per well, and all necessary permits could be obtained in 3 to 3.5 years. (Defs. Ex. 26.) The project would involve geothermal well field development, construction, and operation of a 220-megawatts power plant, as well as construction of a 21-mile power line to Los Alamos. The valuation primarily focused on whether such a project would be commercially feasible. Dr. Albert attributed GeoProducts' inability to produce a project plan to the Government's long-term effort to deny access for preliminary work by GeoProducts.

Dr. Albert relied on the report of Subir Sanyal, Ph.D., of GeothermEx, Inc., dated September 11, 2007 (hereinafter “2007 Sanyal report”). (Defs. Ex. 24.) The assessment of the geothermal energy reserves in the 2007 Sanyal report was based on geological interpretation and a probabilistic analysis of heat-in-place. Dr. Sanyal wrote that such an analysis indicated reserves of 254 megawatts over an area extending from Redondo Canyon to Alamo Canyon and Sulfur Creek. According to the 2007 Sanyal report, the Unocal wells were adversely affected by poor drilling practices and that better drilling practices and plant technology suggested a production potential of about 6 megawatts per well.

Dr. Albert also offered alternate values, based on the 100-megawatt geothermal reserve and power plant size adopted in the Halmbacher appraisal, which in turn was based on the 1998 Sanyal report. (Doc. 221, Ex. 2.) Based on the Halmbacher assumptions, Dr. Albert placed the royalty interest at \$4,500,000 and the value of the operating rights at \$4,500,000-\$8,000,000, for a total alternate value of \$9,000,000 to \$12,800,000 for Defendants’ 12.5 percent interest.

A June 2007 report, prepared by Behre Dolbear & Co., valued the non-geothermal minerals of the 12.5 percent interest, including molybdenum, pumice, sand, and gravel, at \$968,253, and the Bandelier mineral estate at \$968. (Def. Ex. 22.) The Behre Dolbear report estimated the value of the minerals in place. It did not address the costs and risks associated with extraction of the minerals. Dr. Albert relied on the Behre Dolbear estimates of value.

At the October 13, 2009 hearing, Dr. Albert testified that the information in the VCSA (1) increased the original value of the royalty interest from \$8,900,000 to \$9,600,000 (an increase of \$700,000), and (2) increased the original value of the operating rights from \$9,850,000-\$20,800,000 to \$11,300,000-\$23,400,000 (an increase of \$1,450,000 to \$2,600,000), for a total value of \$19,450,000 to \$33,000,000 for Defendants’ 12.5 percent interest. (H’rg Tr. 9, Oct 13, 2009.)

Additionally, Dr. Albert testified, at the October 13, 2009 hearing, that the information in the VCSA (1) increased the alternate value of the royalty interest from \$4,500,000 to \$4,800,000 (an increase of \$300,000), and (2) increased the alternate value of the operating rights from \$4,500,000-\$8,000,000 to \$5,200,000-\$8,800,000 (an increase of \$700,000 to \$800,000), for a total alternate value of \$10,000,000 to \$13,600,000 for Defendants' 12.5 percent interest. (H'rg Tr. 9.)

Dr. Albert also testified that the information in the VCSA reduced his estimate of permitting time from 3.5 to 2.5 years. (H'rg Tr. 10.)

At the October 13, 2009 hearing, Dr. Albert attributed the changes in his opinion precipitated by the VCSA to (1) a reduction in permitting time for a proposed project, (2) reinforcement of his conclusions that mineral development was the highest and best use of the property, and (3) additional bases for criticism of the opinions of Mr. Widdoss. (H'rg Tr. 8-9.) The primary item in the VCSA that changed Dr. Albert's opinion was that the restrictive easement prohibiting surface disturbance indicated that mineral development "was contemplated" and "was a possibility." (H'rg Tr. 10-12.)

On cross examination, Dr. Albert acknowledged that, well before trial, Defendants had the statement of James R. Lyons, Undersecretary of Agriculture for Natural Resources and Environment, before the U.S. Senate Committee on Energy and Natural Resources, Subcommittee on Forest and Public Land Management in their files. (H'rg Tr. 18.) The statement provides, in pertinent part,

On February 7, 2000, the Forest Service and the Santa Clara Pueblo reached agreement on the assignment of approximately 5,045.53 acres of the northeast corner of the Baca Ranch comprising those lands within the watershed of Santa Clara Creek. The assignment also calls for reciprocal easements to protect the watershed boundary area from development and to provide for limited administrative access. The Pueblo agreed to pay the federally approved fair market value of \$4,466,000 toward the overall purchase of the Baca Ranch.

(Pl. Ex. P127.)

Dr. Albert testified that he was not aware of having looked at the Lyons statement before trial, but he might have known about the Santa Clara transaction. (H'rg Tr. 20.) Dr. Albert acknowledged that the Lyons statement referred to the VCSA. (H'rg Tr. 20.)

At the October 13, 2009 hearing, Mr. Widdoss testified that, while he did not have the VCSA before trial, he did review it in July 2009 at the request of counsel for Plaintiff. (H'rg Tr. 37.) Mr. Widdoss testified that the VCSA did not change his opinion as to the value of Defendants' interests because (1) the property valued in the VCSA was different than Defendants' interests, (2) the information in the VCSA was older than the information that Mr. Widdoss used in his appraisal, and (3) the VCSA did not employ the accepted valuation methodologies used to arrive at a stand-alone value for a severed mineral estate. (H'rg Tr. 37.)

IV. Summary of Commissioners' Findings and Judge Scott's Report and Recommendation.

A. Commissioners' Findings (Doc. 177), filed on March 18, 2009.

The Commissioners found as follows. Dr. Albert and Dr. Sanyal overstated the size of the geothermal reserve and opposition to any development of the geothermal resource would delay permitting for more than 3.5 years. (Doc. 177.) To the extent Dr. Albert's assumptions are based on information provided by Mr. Boren, of GeoProducts, not all of the information provided is fully credible. (*Id.*)

The actual amount of energy per well is 6 megawatts. (*Id.*) Dr. Albert's assessment of energy production at the level of 220 megawatts is not credible. (*Id.*)

The low permeability of the subject property discounts the fair market value. (Doc. 177.) The fair market value is additionally discounted because drilling costs have risen faster than the price of electricity. (*Id.*)

If the property had the potential found by Dr. Albert, much more interest and development activity would have occurred. (*Id.*)

GeoProducts made no discernable progress in developing the geothermal resource from the time it entered into the lease until the date of valuation. (*Id.*)

Based on Dr. Albert's valuation of the 12.5% interest at approximately \$18,000,000 to \$29,000,000, the 87.5% mineral interest would have had a value of \$126,000,000 to \$203,000,000, which is far greater than the entire surface area, plus the 87.5% mineral interest, sold for in 2000. (Doc. 177.)

Mr. Widdoss applied a subjective, speculative, and unsupported comparable sales technique. (*Id.*) The calculations in Dr. Albert's rebuttal report, taken in light of Mr. Widdoss' geothermal sales summary may be useful. (*Id.*) The 12.5% mineral interest was appraised by Mr. Halmbacher at \$1,875,000 in 2001. (*Id.*)

The non-geothermal, non-pumice mineral interest is speculative. (Doc. 177.) Risks are associated with the development of the pumice. (*Id.*)

The highest and best use of Defendants' interest is development of geothermal and pumice resources and such development is legally permissible. (*Id.*)

The Commission used an income approach. (*Id.*)

The fair market value of Defendants' 12.5% mineral interest is \$6,100,000, which includes the interest of GeoProducts. (*Id.*) The fair market value of the 1.25% Spears' Bandelier interest is \$800. (*Id.*)

B. Judge Scott's Report and Recommendation (Doc. 190), filed on April 9, 2009.

Defendants filed a motion to sanction Plaintiff for disclosing the VCSA on February 26, 2009, which was four days before trial. The VCSA was prepared on January 18, 2000, and valued

a portion of the Baca Ranch purchased by Santa Clara Pueblo and two restrictive easements.

Defendants contend that Plaintiff “should be severely sanctioned for hiding evidence” and “has been willfully indifferent, if not obstructionist, to both the truth and its obligations under the Constitution and the Rules in this matter.” (Doc. 197.) Plaintiff maintains that the late disclosure was an “unfortunate and innocent oversight” and the documents were “serendipitously” found among papers belonging to a former Forest Service employee. (Doc. 190.)

Judge Scott found that it was uncontested that, at least four days before trial, Defendants had in their possession all of the documents and Defendants affirmatively decided to go forward with the trial rather than seek a continuance. (Doc. 190.) In his Report and Recommendation, Judge Scott concluded that:

because the Defendants knew of and had possession of the previously undisclosed documents prior to trial on the merits, decided not to ask for a continuance, did not inquire as to when the Commission could reconvene if a continuance were to be sought, and did not seek intervention from the Court, the Defendants have effectively waived any objection they may have to the alleged discovery abuses of the Plaintiff.

(Doc. 190 at 2.)

Having concluded that Defendants waived any objection to the late discovery supplemental production, Judge Scott determined it was unnecessary to proceed on the issue of whether Plaintiff’s conduct was intentional. (Doc. 190 at 2-3.) Judge Scott recommended that Defendants’ motion for sanctions be denied. (Doc. 190 at 3.)

V. Discussion.

A. Valuation of Defendants’ Property Interests.

1. Substantive Law Concerning Just Compensation.

The Fifth Amendment requires Plaintiff to pay “just compensation” for “taking” Defendants’ “private property.” U.S. Const. amend. V. “[F]air market value [is] the measure of just

compensation.” *United States v. 819.98 Acres of Land*, 78 F.3d 1468, 1471-72 (10th Cir. 1996). The burden of proof is on the landowner to prove by a preponderance of the evidence the amount of just compensation to which it claims it is entitled. *Bd. of County Supervisors of Prince William County, Va. v. United States*, 116 F.3d 454, 457 (Fed. Cir. 1997); *United States v. L.E. Cooke Co.*, 991 F.2d 336, 341 (6th Cir. 1993). This burden of proof mandates that Defendants demonstrate the legal permissibility and economic feasibility of their proposed use by a preponderance of the evidence. *See Wilson v. United States*, 350 F.2d 901, 908 (10th Cir. 1965).

As just compensation for the condemnation of their property, Defendants are entitled to the value that the property would have commanded in the open market at the time of the taking in light of the highest and most profitable use to which the property might reasonably have been devoted in the near future. *See Olson v. United States*, 292 U.S. 246, 255 (1934). In *Olson*, the Supreme Court stated that the owner is to receive:

the market value of the property at the time of the taking contemporaneously paid in money. . . . Just compensation includes all elements of value that inhere in the property, but it does not exceed market value fairly determined The highest and most profitable use for which the property is adaptable and needed or likely to be needed in the reasonably near future is to be considered, not necessarily as the measure of value, but to the full extent that the prospect of demand for such use affects the market value while the property is privately held.

Id. (citations omitted); *see also McCandless v. United States*, 298 U.S. 342, 345-46 (1936) (“The rule is well settled that, in condemnation cases, the most profitable use to which the land can probably be put in the reasonably near future may be shown and considered as bearing upon the market value.”).

“ ‘The best evidence of market value of real property in condemnation is, of course, found in sales of comparable land within a reasonable time before the taking.’ ” *United States v. 819.98 Acres of Land*, 78 F.3d 1468, 1471 (10th Cir. 1996) (quoting *United States v. 179.26 Acres of Land*,

644 F.2d 367, 371 (10th Cir. 1981); accord *United States v. 10,031.98 Acres of Land*, 850 F.2d 634, 641 (10th Cir. 1988); *United States v. 2,560.00 Acres of Land*, 836 F.2d 498, 502 n. 2 (10th Cir. 1988); *United States v. 25.02 Acres of Land*, 495 F.2d 1398, 1400 (10th Cir. 1974).

Although comparable sales offer the “best evidence of market value,” we have observed “that the law is not wedded to any particular formula or method for determining fair market value as the measure of just compensation.” *Sill Corp. v. United States*, 343 F.2d 411, 416 (10th Cir.), *cert. denied*, 382 U.S. 840 (1965). Thus, in the absence of comparable sales, other methods of valuation—such as the capitalized income approach—may be appropriate to determine the market value of condemned property. *2,560.00 Acres of Land*, 836 F.2d at 504; *179.26 Acres of Land*, 644 F.2d at 372.

United States v. 819.98 Acres of Land, 78 F.3d at 1471.

Potential uses of the property may constitute the “highest and most profitable use.” *2,560.00 Acres of Land*, 836 F.2d at 503-04. However, a potential use will only be considered in the fair market value calculus, if – on the date of taking – the potential use was “reasonably probable in the reasonably near future.” *See United States v. Consol. Mayflower Mines, Inc.*, 60 F.3d 1470, 1476, 1479 (10th Cir. 1995). Thus, a proposed “use” requires a showing of reasonable probability that, at the time of the taking, the land was both physically adaptable for such use and that there was a need or demand for such use in the reasonably near future. *See United States v. 341.45 Acres of Land*, 633 F.2d 108, 111 (8th Cir. 1980).

Regulatory jurisdiction over potential use of the condemned property can decrease the fair market value that the government must pay. *United States v. 2,175.86 Acres of Land*, 687 F. Supp. 1079 (E.D. Tex. 1988). *See also United States v. 62.50 Acres of Land*, 953 F.2d 886 (5th Cir. 1992) (fair market value does not include a potential future use which would require federal and state clearance because permission probably would be denied). While the imminence of governmental regulation may decrease the value of the property, the existence of regulatory hurdles does not render

the evidence of a potential use inadmissible.

The Tenth Circuit has recognized that speculation is inherent in the ascertainment of value of all resource property. *See United States v. Silver Queen Mining Co.*, 285 F.2d 506, 510 (10th Cir. 1960). In *Consolidated Mayflower*, the Tenth Circuit read *Olson* in conjunction with *Montana Railway Co. v. Warren*, 137 U.S. 348, 353 (1890), and held that a landowner whose property has access to undeveloped minerals must prove that extraction of the minerals is the highest and best use of the land and that extraction would have been reasonably probable in the reasonably near future. *See Consol. Mayflower*, 60 F.3d at 1476-79. Absent such proof, fair market value does not include the value of the minerals. *Id.* Ultimately, the law requires Defendants to prove their claims, regarding the highest and most profitable uses for which the property is adaptable and needed in the reasonably near future, by substantial credible evidence. *Consol. Mayflower Mines, Inc.*, 60 F.3d at 1475-77.

These concepts were expressed in the Court's Instructions to the Commissioners (Doc. 164), wherein the Court stated, in pertinent part:

Highest and best use contemplates a present existing use or one reasonably likely to take place in the near future, whereby availability of this future use would have affected the market price. If the landowner presents evidence of a potential use other than the existing use, the landowner must show, by substantial credible evidence, that the potential use was reasonably probable in the reasonably near future of the date of taking – and hence, not a speculative use. Mere possibility of a potential use is not enough. Speculative schemes of the owner or witnesses are to be excluded from your consideration. In order to meet this burden, the landowner must demonstrate, by a preponderance of the evidence, that the proposed use would have occurred within the reasonably near future, but for the government's taking. The "reasonably likely to take place in the near future" element of use is significant here. It is apparent that, if the "future" is beyond or very much beyond the "near future," the use becomes speculative. However, it need only be sufficiently near enough in time to affect the current value.

If you find and believe from the evidence that any of the witnesses have based their opinions as to fair market value upon assumed or proposed uses which, while within the realm of possibility, are not fairly shown to be reasonably probable in the

reasonably near future, you should disregard their testimony.

(Doc. 164 at 20.)

If there is evidence that a permit or license is required for a proposed use of the land, you should not consider the effect of any such permit or license unless the granting of the permit or license has been shown to have already occurred or to be reasonably probable within the reasonably near future, and that it is not merely a remote and speculative possibility.

(Doc. 164 at 21.)

[I]n the absence of evidence of comparable sales within an appropriate time, other methods of valuation – such as the capitalized income approach – may be appropriate to determine the market value of the condemned property. Whatever method is employed, the evidence offered must be supported by convincing evidence, and must have a bearing upon what a willing buyer would pay a willing seller for the property on the date of taking.

(Doc. 164 at 23.)

2. Substantive Law Concerning Report of Land Commissions.

In *United States v. Merz*, 376 U.S. 192 (1964), the Supreme Court held that, while “commissioners need not make detailed findings such as judges do who try a case without a jury ... [they must] reveal the reasoning they use in deciding on a particular award, what standard they try to follow, which line of testimony they adopt, what measure of severance damages they use, and so on.” *Merz*, 376 U.S. at 198. “Conclusory findings are alone not sufficient . . .” *Id.* Instead, the commissioners’ findings must allow the District Court to determine “what path the commissioners took through the maze of conflicting evidence.” *Id.* “The path followed by the commissioners in reaching the amount of the award [must] be distinctly marked.” *Merz*, 376 U.S. at 199. The Commissioners’ Findings do not meet this standard in that they do not set out the path taken by the Commission in reaching its valuations. While the Court would have preferred to affirm the Commission, *Merz* compels the Court to engage in *de novo* review.

3. De Novo Determination of Fair Market Value.

Having conducted a de novo review of the substantial record in this matter, the Court begins by expressing its appreciation to the Commission for its work on this matter. The Commission faced a difficult task in trying to reconcile the divergent values of the appraisals. Although the Court does not adopt the Commissioners' Findings, it found the analysis put forward by the Commission report to be very helpful. The substantial difference between the Court's determination of fair market value of the 12.5 percent interest in the Baca Ranch mineral estate and the Commission's determination is largely a product of different starting points. With the thousands of pages of exhibits and testimony put forward by the parties in this matter, it is particularly important to begin at the right place in determining fair market value of the property rights at issue.

i. Highest and Best Use of the Baca Ranch Mineral Estate.

The law mandates that the place to begin in determining just compensation for condemned property rights is to determine the highest and best use of the property in question. *Olson*, 292 U.S. at 255. "Highest and best use contemplates a present existing use or one reasonably likely to take place in the near future, whereby availability of this future use would have affected the market price." *United States v. 46,672.96 Acres of Land*, 521 F.2d 13, 15 (10th Cir. 1975). The first step in the process of determining highest and best use is to look at the existing use of the property as of the date of the taking. See *United States v. 77,819.10 Acres of Land*, 647 F.2d 104, 110 (10th Cir. 1981).

The evidence on record suggests that, as of May 21, 2006, Defendants were holding their fractional interests in the Baca Ranch mineral estate as a speculative investment. Defendants apparently maintained some level of expectation that development of the geothermal resources would, at some point, become a reality. Geothermal energy and mineral extraction potential clearly exist on the Baca Ranch estate; however, the economic feasibility of a geothermal project is

questionable and the commercial viability of mineral extraction is unexplored and unknown. It is particularly noteworthy that, in 1982, after approximately thirteen years of exploration and more than \$70,000,000 in capital expenditures, the Baca Ranch geothermal energy project was terminated. Moreover, in 1984, Union Geothermal of California (hereinafter “Unocal”) walked away from its lease of the Baca Ranch geothermal resources. Furthermore, as of May 21, 2006, the economic feasibility of extracting non-geothermal minerals had not been explored. Indeed, there has been essentially no development work done on the property for the more than 20 years since the Baca Ranch geothermal energy project was terminated.

The Court is cognizant that GeoProducts obtained a lease of the geothermal minerals and for geothermal energy development in 2000. However, from the time the lease was entered into until the date of condemnation, there was no discernible progress in GeoProducts’ efforts to develop the geothermal resources underlying the Baca Ranch. Indeed, at the time of the taking, GeoProducts’ project remained in the conceptual stage of development. No serious steps had been taken to begin the lengthy process of obtaining permits, locating investors and financiers, building capital infrastructure, or negotiating purchase agreements required to exploit the geothermal resources underlying the Baca Ranch.

Despite the lack of progress since 1982 in developing a commercially viable geothermal energy project on the Baca Ranch and the absence of any serious efforts to explore the economic feasibility of extracting non-geothermal mineral resources from the property, Defendants maintain that, as of May 21, 2006, the highest and best uses of their interest in the Baca Ranch mineral estate included the development of a 220-megawatt electrical power plant along with the commercial mining of pumice, molybdenum, and sand and gravel.

It is important to note that Defendants are required to prove their claims, regarding the highest

and most profitable uses for which the property is adaptable and needed in the reasonably near future, by substantial credible evidence. *Consol. Mayflower Mines, Inc.*, 60 F.3d at 1475-77. This burden of proof mandates that Defendants demonstrate the legal permissibility and economic feasibility of their proposed use by a preponderance of the evidence. *See Wilson*, 350 F.2d at 908.

James Hodos, an expert witness for the United States, concluded that all permits for development of the mineral resources on the Baca Ranch would eventually be granted. Finding Mr. Hodos' testimony credible and concluding that exploitation of geothermal energy resources underlying the Baca Ranch and extraction of non-geothermal minerals from the property constitute legally permissible uses of Defendants' mineral interests, the Court will turn its attention to the economic feasibility of Defendants' proposed highest and best uses of their property rights. *See XTO Energy, Inc. v. Armenta*, 144 N.M. 212, 215, 185 P.3d 383, 386 (Ct. App. 2008); *Strata Production Co. v. Mercury Exploration Co.*, 121 N.M. 622, 626 n.1, 916 P.2d 822, 826 n.1 (1996).

Defendants rely on the 2007 Sanyal report and testimony of Dr. Sanyal in an attempt to demonstrate the feasibility of a 220-megawatt geothermal energy project at the Baca Ranch. However, Dr. Sanyal's 2007 expert report and testimony are almost entirely devoid of any probative value with regards to the question of whether the development of a 220-megawatt electrical power plant, fueled by geothermal power, on the Baca Ranch is physically possible or economically feasible. For example, Dr. Sanyal's use of probabilistic analysis based on heat-in-place to make the assessment that a 254-megawatt reserve exists over an area extending from Redondo Canyon to Alamo Canyon and Sulfur Creek says absolutely nothing about whether or not that 254-megawatt reserve underlying the Baca Ranch can be economically exploited for the production of electricity. In addition, Dr. Sanyal's opinion that a gross reserve value of 254 megawatts would be consistent with a net power plant output of 200 megawatts says absolutely nothing about whether or not the

254-megawatt reserve underlying the Baca Ranch can be economically exploited to produce a net power plant output of 200 megawatts, let alone the 220-megawatt geothermal energy project Defendants propose.

Dr. Sanyal also ignores factors that have inhibited the exploitation of the geothermal resources underlying the Baca Ranch. Indeed, according to the 1998 Sanyal report issued by Dr. Sanyal's company, GeothermEx, Inc., Unocal abandoned its development efforts at Redondo Creek—the only area on the Baca Ranch that appears to have realistic potential for commercial generation of geothermal power—because the development wells did not demonstrate sufficient productive capacity to support a 50-megawatt plant. Moreover, a preponderance of the evidence indicates that low permeability thickness has inhibited commercial exploitation of the vast geothermal energy potential underlying the Baca Ranch. The 1998 Sanyal report suggests that the potential productive capacity of the geothermal resources underlying the Baca Ranch is between 20 and 40 megawatts. The weight of the evidence, however, indicates that the proven productive capacity of the geothermal resources underlying the Baca Ranch is approximately 20 megawatts.

Despite the abundance of evidence that, in light of the constraining factor of low permeability thickness, a 20-megawatt facility is the most realistic geothermal energy project on the Baca Ranch, Defendants' key expert, Dr. Albert, focused exclusively on demonstrating the economic feasibility of a 220-megawatt geothermal energy project. The analysis put forward in Dr. Albert's expert report and testimony regarding the economic feasibility of geothermal energy production on the Baca Ranch is flawed for a number of reasons, but the key error that renders his report unreliable is the exaggeration of exploitable geothermal energy reserves on the Baca Ranch. Indeed, based on geological conditions on the Baca Ranch and the technology available as of May 21, 2006, a commercial 220-megawatt geothermal energy facility on the Baca Ranch is unrealistic. If that level

of commercial productive capacity existed, the Baca Ranch would not have remained undeveloped for over 20 years.

Other major methodological flaws in Dr. Albert's report include: (1) his failure to calculate a market value of the property (Dr. Albert's conclusion is an appraised value of the property); (2) Dr. Albert's unrealistic assessments of risk; and (3) his unsupportable projections of the time required for obtaining permits and litigating environmental and religious liberty claims that would almost certainly accompany any development on the Baca Ranch. In short, the Court finds Dr. Albert's report to be unreliable and devoid of probative value.

The Court notes that Paul Brophy, an expert witness for the United States, concluded that a 20-megawatt geothermal energy project on the Baca Ranch would not have been commercially viable as of May 21, 2006. Mr. Brophy's conclusion can be roughly tested by extrapolating from the 1998 Sanyal report, which provides an estimate that, as of June 30, 1998, a potential 20-megawatt geothermal facility on the Baca Ranch would have had a present value of \$7,600,000. As a first level analysis, the fact that a geothermal energy project did not move forward in the wake of the 1998 Sanyal report suggests that the projected return on investment for a geothermal project on the Baca Ranch was insufficient to justify the capital expenditures required for the project, especially in light of the risks associated with such a project.

A very rough second level analysis is even more compelling. The evidence before the Court indicates that the most significant economic change that occurred between June 30, 1998 and May 21, 2006 was the 40 percent increase in the cost of drilling. The 1998 Sanyal report estimates that the capital cost for a 20-megawatt geothermal facility would include \$18,000,000 for drilling. A 40 percent increase in the cost of drilling would have increased the cost of drilling by \$7,200,000. In light of the projected value of the investment in a geothermal energy project on the Baca Ranch—i.e.,

\$7,600,000—a \$7,200,000 increase in the cost of drilling would almost certainly render a 20-megawatt geothermal project economically unattractive, if not unfeasible. Moreover, the economic impact of the rise in drilling costs would have been especially detrimental to a proposed geothermal energy project at the Baca Ranch given the increased drilling requirements associated with geothermal reservoirs with low permeability thickness.

The Court realizes that its rough analysis and offhand calculations may be statistically flawed and fail to take into account other relevant economic factors. However, the Court’s analysis is only intended as a crude test of the credibility of Mr. Brophy’s assessment that, as of May 21, 2006, a 20-megawatt facility on the Baca Ranch would not have been commercially viable. The Court finds Mr. Brophy’s assessment to be credible. The facts that no development work had been done on the property for more than 20 years and that GeoProducts had not gotten past the conceptual phase of development—e.g., GeoProducts had not even begun the process of obtaining permits for their proposed geothermal energy project—substantiate Mr. Brophy’s conclusion. Moreover, Defendants’ failure to present a credible, updated analysis of the economic feasibility of a 20-megawatt geothermal energy project tacitly corroborates Mr. Brophy’s conclusion. Finally, the Court notes that Defendants had the burden of proving that commercial exploitation of the geothermal energy resources underlying the Baca Ranch was economically feasible as of May 21, 2006 and failed to carry that burden. *See Consol. Mayflower Mines, Inc.*, 60 F.3d at 1475-77.

Concluding that Defendants failed to carry their burden of proving that, as of May 21, 2006, commercial exploitation of the geothermal resources underlying the Baca Ranch was economically feasible and that the development of the geothermal energy resources was, in fact, not economically feasible, the Court finds that commercial exploitation of the geothermal energy resources underlying the Baca Ranch was not a highest and best use of the property. *See Wilson*, 350 F.2d at 908.

Defendants rely on an expert report of Behre Dolbear & Company, Inc. (hereinafter “Behre Dolbear”) and expert testimony of William F. Jennings in an attempt to demonstrate that non-geothermal mineral extraction is a highest and best use of Defendants’ fractional interest in the mineral resources underlying the Baca Ranch. (H’rg Tr. 199-233, Mar. 2, 2009.) However, the Behre Dolbear report and testimony of Mr. Jennings do not adequately address the question of highest and best use.

For example, the Behre Dolbear report simply assumes that the highest and best use of a mineral interest is its development. This assessment completely ignores the economic realities of developing mineral resources. Indeed, basic cost-benefit analysis indicates that if the economic costs of developing any given mineral interest outweigh the economic benefits, then the mineral interest should not, and will not, be developed. In addition, the Behre Dolbear report provides an unsupported assessment that it is physically possible, legally permissible, and economically feasible to develop mineral interests on the Baca Ranch. This assessment is largely based on the ongoing commercial exploitation of pumice at a location near the Baca Ranch. However, Mr. Jennings testified on cross-examination that, as of May 21, 2006, there had not been any commercial exploration of non-geothermal mineral deposits on the Baca Ranch, and that the economic feasibility of extracting non-geothermal minerals had not been explored. (H’rg Tr. 236.)

Defendants have the burden of proving by a preponderance of the evidence that, but for the government’s taking, non-geothermal mineral extraction on the Baca Ranch would have been reasonably probable in the reasonably near future. *See United States v. 27.93 Acres of Land*, 924 F.2d 506, 512 (3d Cir. 1991). In addition, the Court reiterates that Defendants have the burden of proving that non-geothermal mineral extraction would have been economically feasible as of May 21, 2006. *See Consol. Mayflower Mines, Inc.*, 60 F.3d at 1475-77. Given the absence of any serious

development efforts related to non-geothermal mineral extraction on the Baca Ranch, the Court cannot find that non-geothermal mineral extraction would have occurred on the property in the reasonably near future. *See United States v. 27.93 Acres of Land*, 924 F.2d at 512. Moreover, Defendants have failed to demonstrate by a preponderance of the evidence that commercial extraction of non-geothermal minerals on the Baca Ranch was economically feasible as of May 21, 2006. Thus, the Court finds that the commercial extraction of non-geothermal mineral deposits underlying the Baca Ranch was not a highest and best use of Defendants' mineral interests. *See Wilson*, 350 F.2d at 908.

Noting that Defendants have failed to prove their claim that, as of May 21, 2006, development of a geothermal energy project and commercial extraction of the non-geothermal minerals constituted the highest and best uses of the property in question, the Court concludes that the existing use at the time of the taking was the highest and best use. *See United States v. 77,819.10 Acres of Land*, 647 F.2d at 110; *Wilson*, 350 F.2d at 908. Indeed, “[o]rdinarily the highest and best use for the property condemned is the use to which it is subjected at the time of the taking.” *United States v. 77,819.10 Acres of Land*, 647 F.2d at 110. As previously articulated, the evidence on record indicates that, as of May 21, 2006, Defendants were holding their fractional interests in the Baca Ranch mineral estate as a speculative investment. Thus, the Court finds that, as of May 21, 2006, the highest and best use of Defendants' 12.5 percent interest in the Baca Ranch mineral estate was to hold these property rights as a speculative investment in anticipation that market conditions would facilitate future development of the geothermal resources.

ii. Valuation of the 12.5 Percent Interest in the Baca Ranch Mineral Estate.

Just compensation for Defendants' 12.5 percent interest in the Baca Ranch mineral estate is determined by calculating the fair market value of the property as of May 21, 2006. *Sill Corp. v.*

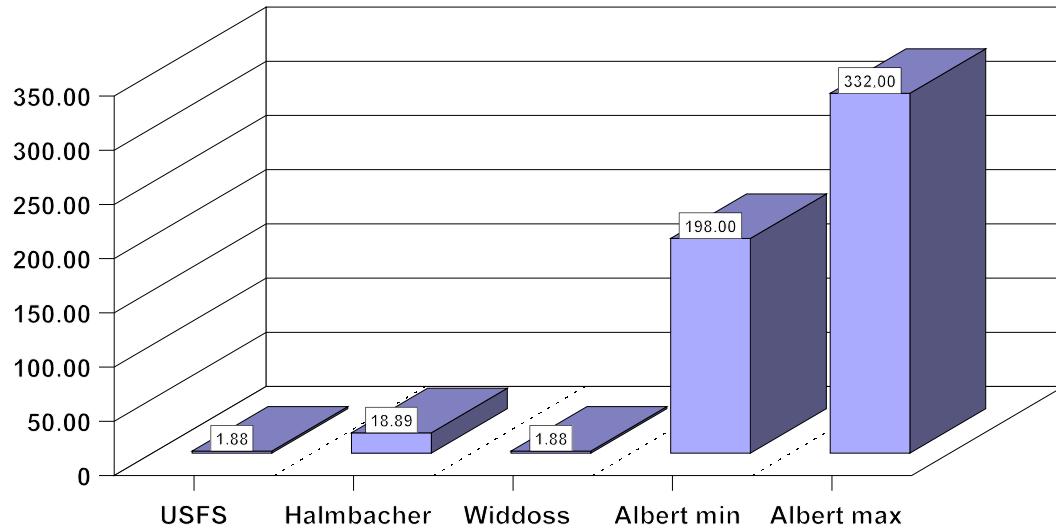
United States, 343 F.2d at 416. “The best evidence of market value of real property in condemnation is, of course, found in sales of comparable land within a reasonable time before the taking.” *United States v. 179.26 Acres of Land*, 644 F.2d at 371. Although comparable sales offer the best evidence of market value, “the law is not wedded to any particular formula or method for determining fair market value as the measure of just compensation.” *United States v. 819.98 Acres of Land*, 78 F.3d at 1472 (quoting *Sill Corp.*, 343 F.2d at 416). Defendants carry the burden of establishing the fair market value of the property in question by competent evidence. *United States ex rel T.V.A. v. Powelson*, 319 U.S. 266, 273-74 (1943).

The Court here notes that its determination that exploitation of the geothermal resources underlying the Baca Ranch was not economically feasible, as of May 21, 2006, does not necessarily indicate that a 12.5 percent interest in the Baca Ranch mineral estate would have been worthless or of nominal value. See *United States v. 819.98 Acres of Land*, 78 F.3d at 1476-77. The market value of mineral rights is largely contingent upon (1) the level of certainty regarding the existence and size of mineral deposits, (2) the market price for the mineral or commodity produced from the mineral, and (3) the cost of extracting the mineral or commodity produced from the mineral. In this case, there is a high level of certainty regarding the existence of a vast geothermal reservoir underlying the Baca Ranch. However, as of May 21, 2006, the relatively low price of electricity and relatively high cost of producing electricity from the geothermal reservoir underlying the Baca Ranch rendered exploitation of these geothermal resources economically unfeasible.

It is not unreasonable, however, to believe that development of the geothermal resources underlying the Baca Ranch may become commercially feasible in the near future. Technological innovation, a decline in cost of producing electricity from the Baca Ranch geothermal reservoir, an increase in demand for electricity, or a government subsidy for geothermal power could create the

market conditions necessary to make exploitation of the geothermal resources underlying the Baca Ranch a highly lucrative project and likely to take place in the near future. The task of assessing the market value of a mineral estate that is being held as a speculative investment is difficult because there is a high level of uncertainty inherent in speculative investments. Moreover, the challenge of appraising the Baca Ranch mineral estate is even more difficult because geothermal development there constitutes a high risk/high reward proposition. Indeed, as earlier development efforts prove, the development of a geothermal project on the Baca Ranch is a highly risky endeavor that requires huge up front capital expenditures. Even so, interest in the Baca Ranch has not been fully extinguished because the potential still exists for a major windfall from successful development of the Baca Ranch geothermal resources.

There is a high degree of variation among the appraisals. The degree of disparity is best illustrated by a display of the variation in per acre dollar values of Defendants' 12.5 percent interest in the following chart.



The dramatic differences in the various appraisals of fair market value of the Baca Ranch mineral estate can be largely attributed to the parties' differing assumptions regarding highest and best use. The Court's determination of fair market value must be informed by its conclusions that, as of May 21, 2006, the development of the geothermal energy resources was not economically feasible and that the highest and best use of Defendants' fractional interest in the mineral resources underlying the Baca Ranch was to hold these property rights as a speculative investment. *See Consol. Mayflower Mines, Inc.*, 60 F.3d at 1475. Appraisals that do not reasonably conform to the Court's determination of highest and best use must be discounted. *See Id.*

The wide variation among the various appraisals can also be attributed to the differing approaches to valuation used by the parties' experts. Defendants' appraisals of the property's fair market value tend to be based on the income approach to valuation. The appraisals put forward by the United States' experts tend to be based on the comparable sales method. Comparable sales is the preferred method of valuation in the Tenth Circuit. *United States v. 179.26 Acres of Land*, 644 F.2d at 371. Moreover, the Court questions the soundness of the income approach, especially when used to value mineral resources that are being held as a speculative investment. Indeed, the income approach does not appear to be reasonably connected to the realities of the mineral market. In addition, using the income approach to determine fair market value is likely to be even more unreliable in this case because, at the time of the taking, development of the geothermal resources underlying the Baca Ranch was not economically feasible.

For example, Dr. Albert used the income approach to appraise the 12.5 percent interest in the minerals underlying the Baca Ranch as being valued between \$18,750,000 and \$29,700,000. This would give the other 87.5 percent interest in the minerals underlying the Baca Ranch an appraised value of between \$131,250,000 and \$207,900,000. However, the United States purchased the entire

Baca Ranch surface estate and 87.5 percent of the mineral estate for \$101,476,958 in 2000.

It is material that many of Dr. Albert's figures exceed the per acre price paid for the entire surface estate and 87.5% of the mineral estate in the 2000 sale. Notably, Dr. Albert's opinions fluctuated dramatically based on the VCSA, which claims scant relevance to the value of Defendants' interests.

This is a just compensation case. The burden of proof is on Defendants to prove by a preponderance of the evidence the amount of just compensation to which they claim they are entitled.

Bd. of County Supervisors of Prince William County, Va. v. United States, 116 F.3d at 457; *United States v. L.E. Cooke Co.*, 991 F.2d at 341. This burden of proof mandates that Defendants demonstrate the legal permissibility and economic feasibility of their proposed use by a preponderance of the evidence. *See Wilson*, 350 F.2d at 908. Defendants have not met this burden.

The evidence indicates that the geothermal resource could support a maximum operating capacity of 20 megawatts. Plaintiff points out that the best evidence of market value would be sales of properties containing 20 megawatts of geothermal operating capacity. (Doc. 206.) Mr. Widdoss identified four sales of properties with geothermal facilities operating at 9.9 megawatts to 21 megawatts that occurred between 2001 and 2004. (Pl. Ex. P1 at 108). The sales prices ranged from \$9,000,000 to \$30,500,000 for 100 percent of these operational facilities. Defendants' 12.5 percent share of these values would equal between \$1,125,000 to \$3,812,500. (Doc. 206.) These sales appear to constitute the best evidence of value.

The Court's baseline criterion for what constitutes a comparable sale is the size of proven geothermal resource. Having concluded that the Baca Ranch has a proven geothermal resource of 20 megawatts, the Court will evaluate sales of sites with similar proven geothermal resources, including the Brady Project and the Stillwater Plant.

The property associated with the Brady Project was acquired in July 2001 for \$30,500,000 and had a proven geothermal resource capacity of 21 megawatts. The property associated with the Stillwater Plant was acquired in December 2004 for \$12,000,000 and had a proven geothermal resource capacity of 21 megawatts. The Court recognizes that the Baca Ranch is much larger than these geothermal sites and has greater overall geothermal potential. The Court also understands that there may be greater impediments to geothermal development on the Baca Ranch than on these sites, and that these sites had more capital development and infrastructure in place on the date of sale. However, based on the totality of the circumstances, the Court views the sale of these geothermal properties as being generally comparable to the sale of the Baca Ranch mineral estate.

On a more specific level, the Court views the geothermal resources associated with the Brady project as being commercially superior to the geothermal resources underlying the Baca Ranch and the geothermal resources associated with the Stillwater Plant as being commercially inferior to that of the Baca Ranch. Assuming that the entire purchase price for these sites was to gain an interest in the geothermal mineral resources, a 12.5 percent interest in these properties would constitute \$3,812,500 and \$1,500,000, respectively.

Inflation would have impacted the fair market value of the property at issue in this litigation. In order to calculate the effect of inflation on the fair market value of the Baca Ranch mineral estate, the Court takes judicial notice of the credible and easily accessible economic data on inflation that is collected by the federal government. Using the Consumer Price Index to adjust for inflation, \$3,812,500 from the 2001 Brady sale is equivalent to \$4,339,921 in 2006, and \$1,500,000 from the 2004 Stillwater sale is equivalent to \$1,716,599 in 2006. The Court, therefore, concludes that the 12.5 percent interest in the Baca Ranch mineral estate had a fair market value within the range of \$1,716,599 and \$4,339,921 as of May 21, 2006.

The Court believes that heightened interest in green energy would also have enhanced the relative market value of the 12.5 percent mineral interest in the Baca Ranch between the dates of the comparative sales and May 21, 2006. During the intervening time period, there was a boom in geothermal energy development. This boom in geothermal energy development most likely reflected growing economic and political interest in green energy, including geothermal energy. The rise in tax incentives and subsidies for green energy would have affected the market price for the Baca Ranch mineral estate. Because geothermal development of the Baca Ranch—including permitting, litigation, and development of infrastructure—would probably have taken at least ten years, the availability of tax incentives and other subsidies, which were provided for bringing green energy online within a shorter time frame, would have been an uncertain prospect. However, the general movement toward green energy would have been reflected in the market price of the Baca Ranch mineral estate. Recognizing that the Baca Ranch still would have been considered a highly speculative geothermal project, the Court, nevertheless, estimates that the boom in geothermal energy development would have placed the market value of the Baca Ranch mineral estate in the upper 15 percent of the comparable sales range. Considering the comparable sales in light of the increased interest in geothermal power, the rate of inflation, and the impediments to development of the Baca Ranch geothermal resource, the Court concludes that, as of May 21, 2006, the fair market value of Defendants' 12.5 percent interest in the Baca Ranch mineral estate was \$3,800,000. This value includes GeoProducts' interests.

iii. Highest and Best Use of the Bandelier Mineral Estate.

The evidence on record suggests that, as of May 21, 2006, the 1.25 percent interest in the Bandelier mineral estate was being held as a speculative investment. No evidence was put forward suggesting that there was another highest and best use for the Bandelier mineral estate. Thus, the

Court concludes that, as of May 21, 2006, the highest and best use of the 1.25 percent interest in the Bandelier mineral estate was to hold it as a speculative investment. *See United States v. 77,819.10 Acres of Land*, 647 F.2d at 110.

iv. Valuation of the 1.25 Percent Interest in the Bandelier Mineral Estate.

Although there was not an explicit objection to the Commission's valuation of the Bandelier mineral estate, the Commission did not provide any reasoning for its determination of the market value of the 1.25 percent interest in the Bandelier mineral estate. Indeed, without explanation, the Commission determined that, as of May 21, 2006, the 1.25 percent interest in the Bandelier mineral estate had a fair market value of \$800. Moreover, the Court recognizes that the cost of registering an objection in this litigation is almost certainly greater than Defendant Spears' entire economic interest in the 1.25 percent Bandelier mineral estate. The Court recognizes that this constitutes a relatively small matter. Nevertheless, the law requires the Court to demonstrate the reasoning it used in determining fair market value. *United States v. Merz*, 376 U.S. at 198. Therefore, the Court, having reviewed the record de novo, will provide its own assessment of the fair market value of the 1.25 percent interest in the Bandelier mineral estate.

The Behre Dolbear analysis of the value of non-geothermal mineral resources indicates that, expressed in 2006 dollars, the average of comparable sales for mineral rights on properties with no known mineral potential is \$17.92 per acre. However, because of the unique geological characteristics of the Baca Ranch, Behre Dolbear considers \$25 per acre the minimum value that can be attributed to the acreage on the Baca Ranch that has no known mineral potential. Noting that the Bandelier mineral estate is similar to the acreage on the Baca Ranch with no known mineral potential, the Court finds that \$25 per acre constitutes a fair assessment of market value for the Bandelier mineral estate. Thus, the Court finds that, as of May 21, 2006, the 1.25 percent interest in the

Bandelier mineral estate had a fair market value of \$968.

B. Defendants' Request for Sanctions.

Defendants seek sanctions for the late disclosure of the VCSA. On September 26, 2007, Judge Scott granted the portion of Defendants' Motion to Compel directed at pre-condemnation appraisals and related documents and ordered Plaintiff to produce such documents. (Doc. 56 at 4-5.) The VCSA, which was dated January 18, 2000, values a portion of the Baca Ranch. Therefore, the VCSA was covered by Judge Scott's September 26, 2007 order. Rule 37 provides that a court may impose a range of sanctions on a party who fails to obey an order to provide or permit discovery. *See* Fed. R. Civ. P. 37(b)(2). Because Plaintiff did not produce the VCSA as ordered by Judge Scott, Rule 37 applies.

In his Report and Recommendation, Judge Scott determined that Defendants waived any objection to the late disclosure of the VCSA because they did not move to continue the trial. Judge Scott recommended that Defendants' motion for sanctions be denied. While this recommendation is entirely reasonable, it is subject to de novo review. In light of the developments in the case since Judge Scott issued his Report and Recommendation, the Court finds that Defendants should be compensated for their reasonable attorney's fees and costs that they incurred as a result of the belated disclosure of the VCSA.

A court may impose a range of sanctions on a party who fails to obey an order to provide or permit discovery. *See* Fed. R. Civ. P. 37(b)(2). Rule 37(b)(2) permits a court to issue such orders "as are just" to sanction a disobedient party. *Id.* Such sanctions may include taking certain facts as established, prohibiting the introduction of certain evidence, or treating as contempt of court the failure to obey the order. *See* Fed. R. Civ. P. 37(b)(2)(A)(i), (ii), and (vii). Instead of, or in addition to, any such order, the Court must order the disobedient party, the attorney advising that party, or

both, to pay the reasonable expenses, including attorney fees, caused by the failure, unless the failure was substantially justified or other circumstances make an award of expenses unjust. *See Fed. R. Civ. P. 37(b)(2)(C).*

As sanctions, Defendants request that the Court (1) enter judgment against Plaintiff consistent with Defendants' Proposed Findings in the amount of \$30,310,785, (2) set just compensation at \$5,224,129.05, plus interest from 2000, (3) award Defendants \$5,037,629.05, which represents the difference between the United States' litigation valuation of \$186,500 and the \$5,224,129.05 value, (4) award attorney fees and costs incurred as a result of the late disclosure, (5) deem Plaintiff's objections to the Commissioners' Findings to be waived, and (5) rule that Plaintiff's \$700,000 is forfeit to Defendants. (*See* Docs. 171, 182, and 197.)

Such drastic sanctions are unwarranted in that Defendants have failed to show the belated disclosure prejudiced them with respect to the amounts awarded by the Commission. Notably, the VCSA did not purport to value Defendants' mineral interests on the Baca Ranch; it valued 5,046 acres and two restrictive easements in the northeastern corner of the Baca Ranch. The subject area contains no known geothermal resources and is far removed from the Redondo Creek area.

It is difficult to fathom how Dr. Albert transformed the value placed on the easements into an increase in value ranging from \$1,100,000 to \$3,300,000 in Defendants' 12.5 percent interest in the mineral estate. In any event, the loss of value attributed to the prohibited surface disturbance amounts to a decrease in value of \$40.84 per acre on the surface estate; it does not purport to value minerals. The 5 percent surface disturbance prohibition equates to 1,193.3590-acre easement in favor of Santa Clara Pueblo, and \$14,883 for the 364.4285-acre easement in favor of Baca Ranch, or \$63,620 in total loss of value to the surface estate attributed to the surface disturbance prohibition imposed by the easement.

At least five factors come to mind that undercut Defendants' claim that the late disclosure of the VCSA prejudiced their case before the Commission. First, both the VCSA and the Van Court original appraisal focus on the value of the surface estate, not the mineral interest. Second, the nature of the property that is the subject of the VCSA differs from the rest of the Baca Ranch in that it is isolated, mountainous, and lacking in geothermal exploratory development. Third, the reasoning of the VCSA is similar to the analysis contained in the original Van Court appraisal. Fourth, the sale considered in the VCSA was public record and Defendants had documents regarding the sale in their file. Fifth, the reasoning of the VCSA with respect to the 5 percent value for surface disturbance was arbitrary. To seize on this arbitrary percentage to value a mineral estate strains credulity. All of these factors undercut Defendants' claim that they were severely prejudiced by the late disclosure of the VCSA with respect to the Commissioners' Findings.

Defendants seek monetary sanctions due to additional attorney fees incurred as the result of the late disclosure. Defendants claim that attorney fees and costs caused by the late disclosure total \$40,144.38, plus 7 percent gross receipts tax, for September 2009. Additionally, they assert that their attorney fees and costs incurred due to the late disclosure through August 31, 2009 total \$180,059.19, plus 7 percent gross receipts tax. The total amount of the claimed attorney fees is \$220,203.57, plus 7 percent gross receipts tax (\$15,414.25), for a grand total of \$235,617.82. The Court finds these requests excessive.

At the same time, the Court is cognizant that Defendants incurred attorney fees that would not have been necessary but for the late disclosure of the VCSA. In this respect, Defendants were prejudiced. Defendants should be awarded reasonable expenses, including attorney's fees in an amount necessary to compensate Defendants for the late disclosure. *See Fed. R. Civ. P. 37(b)(2)(C)* (permitting court to order payment of reasonable expenses, including attorney's fees, caused by the

failure to obey order). The Court finds that fees should be awarded in favor of Defendant and against Plaintiff in the amount of \$50,000, which represents reasonable attorney's fees and costs expended by Defendant as the result of the late disclosure of the VCSA.

VI. Conclusion.

Having conducted a de novo review of the record, the Court has rejected the valuations put forward by the Commission and determined that, as of May 21, 2006, Defendants' 12.5 percent interest in the Baca Ranch mineral estate, including GeoProducts' interest, had a fair market value of \$3,800,000, and the 1.25 percent interest in the Bandelier mineral estate had a fair market value of \$968. In addition, Plaintiff is ordered to pay Defendants \$50,000 to compensate Defendants for reasonable attorney's fees and costs incurred by Defendants as the result of the late disclosure of the VCSA.

WHEREFORE,

IT IS ORDERED that Defendants' Motion to Adopt the Special Commission's Report (Doc. 188), filed on April 7, 2009, is **DENIED**.

IT IS FURTHER ORDERED that Plaintiff's Objections to the Commissioners' Findings and Motion to Modify Award of Just Compensation (Doc. 198), filed on May 7, 2009, are **GRANTED IN PART**.

IT IS FURTHER ORDERED that the Commissioners' Findings (Doc. 177), filed on March 18, 2009, are **MODIFIED**.

IT IS FURTHER ORDERED that just compensation for the taking of the 12.5 percent interest in the Baca Ranch mineral estate, including the leases of the geothermal minerals and for geothermal energy development held by GeoProducts, is set at **\$3,800,000**.

IT IS FURTHER ORDERED that just compensation for the taking of the 1.25 percent

interest in the Bandelier mineral estate is set at **\$968**.

IT IS FURTHER ORDERED that Defendants' Objections to the April 9, 2009 Report and Recommendation (Doc. 197), filed on April 22, 2009, are **GRANTED IN PART**.

IT IS FURTHER ORDERED that the Magistrate Judge's Report and Recommendation Relative to Defendants' Second Motion for Sanctions and Request for Expedited Hearing (Doc. 190), filed on April 9, 2009, is **MODIFIED**.

IT IS FURTHER ORDERED that Plaintiff shall pay Defendants **\$50,000** to compensate Defendants for reasonable attorney's fees and costs incurred by Defendants as the result of the late disclosure of the VCSA.



ROBERT C. BRACK
UNITED STATES DISTRICT JUDGE